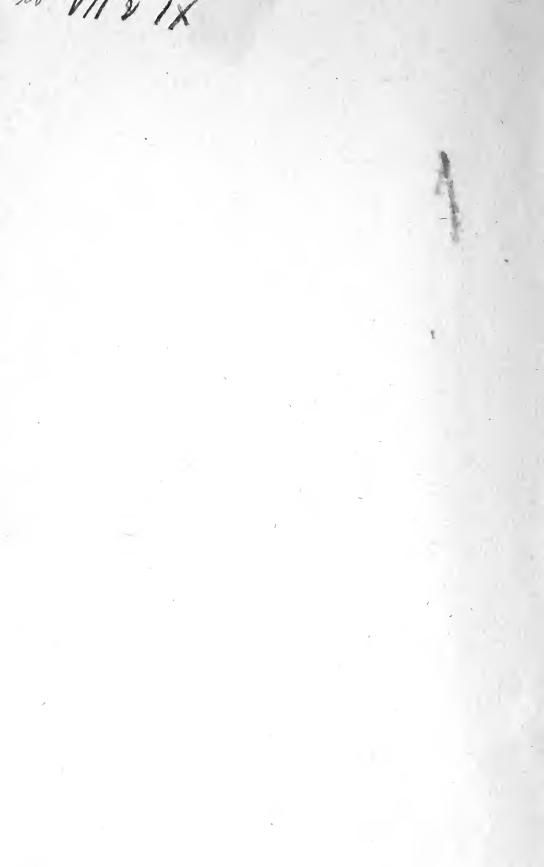
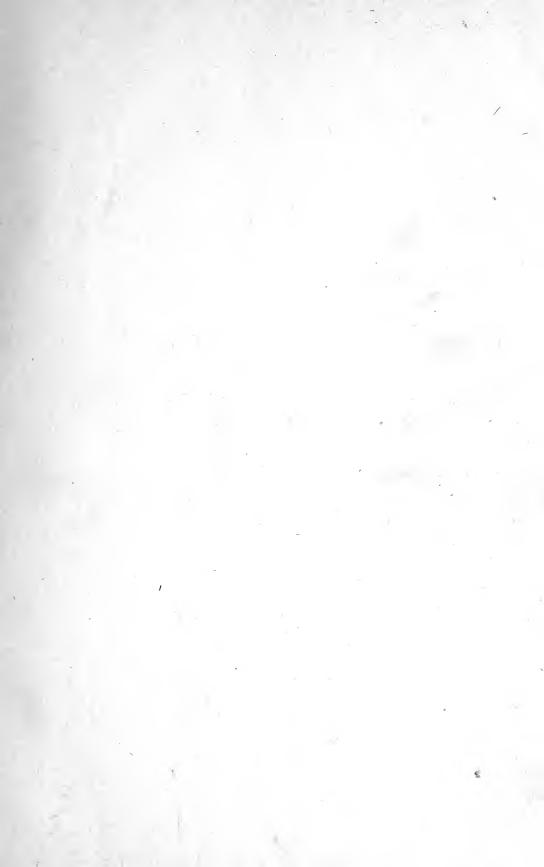
Alllol 294880

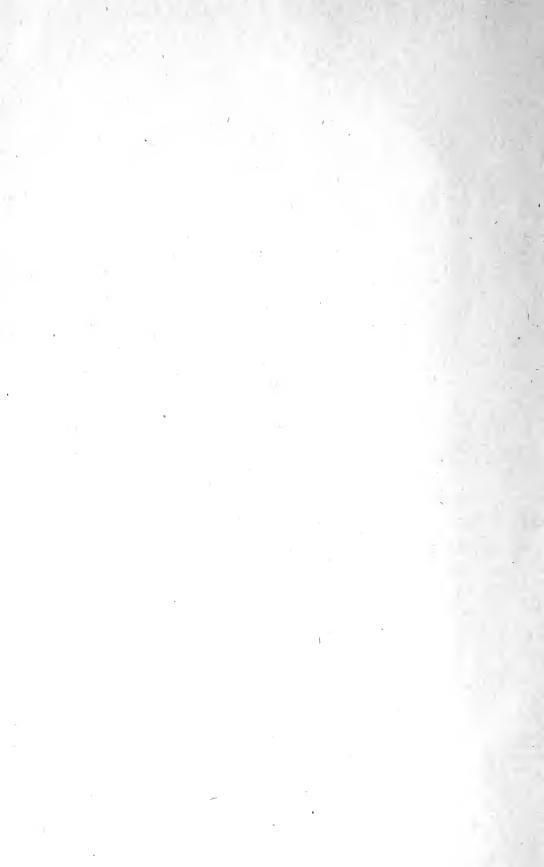
NATL INST OF STANDARDS & TECH R.I.C.

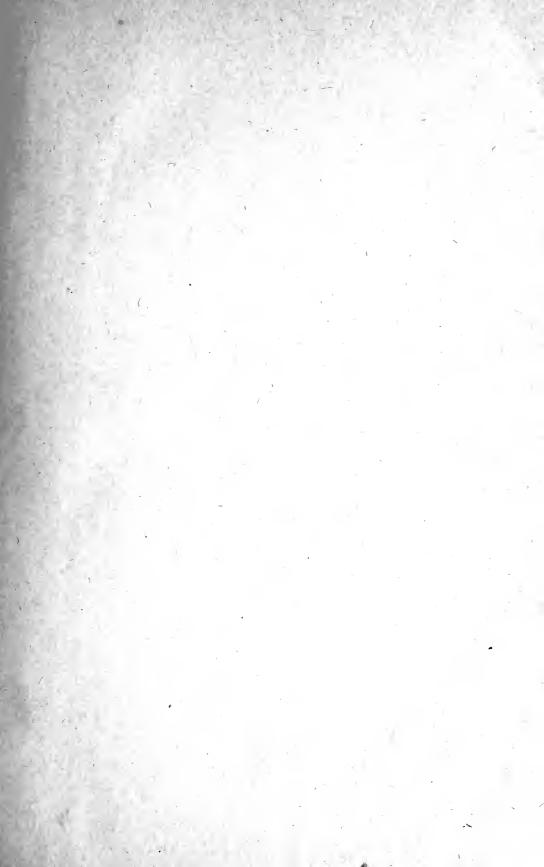
A11101294880

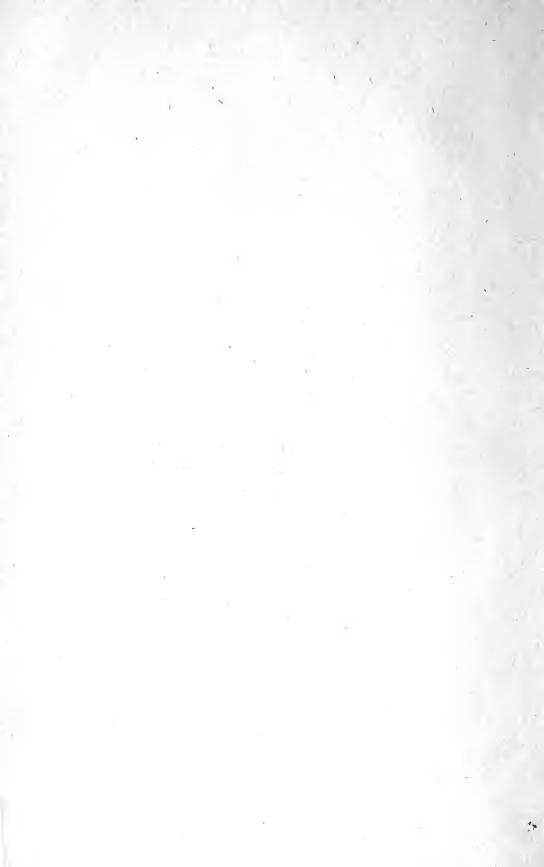
/Bulletin of the Bureau of Standards
QC1.U5 V1;1904-5 C.1 NBS-PUB-C 1905











MAR 7 190 4434 QCA

DEPARTMENT OF COMMERCE AND LABOR

BULLETIN

OF THE

Bureau of Standards

S. W. STRATTON Director

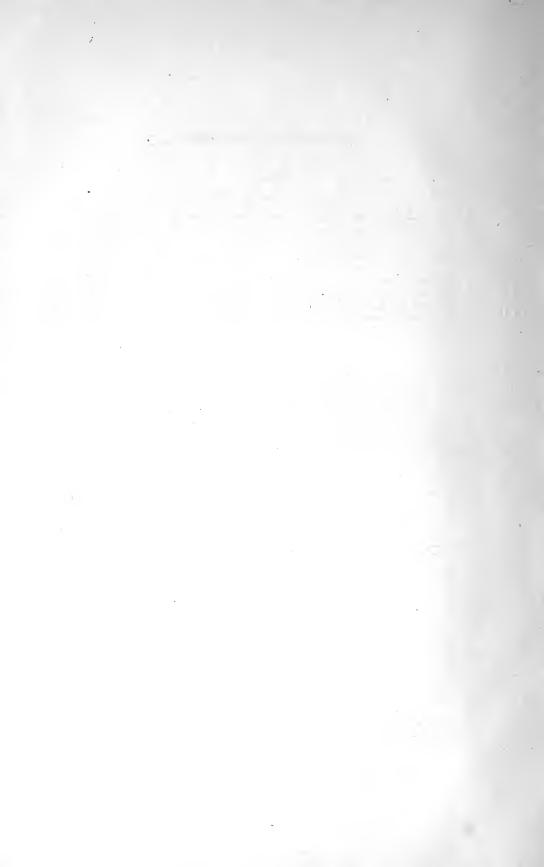
VOLUME 1

(Numbers 1, 2, 3)

1904-05



WASHINGTON
GOVERNMENT PRINTING OFFICE
1905



CONTENTS OF VOLUME 1.

NO. 1.

	[Issued November 1, 1904.]	D
1.	RECOMPARISON OF THE UNITED STATES PROTOTYPE METERL. A. Fischer	Page.
2.	A STUDY OF THE SILVER VOLTAMETER. K. E. Guthe	21
3.	THE SO-CALLED INTERNATIONAL ELECTRICAL UNITSFrank A. Wolff	39
	The Spectra of Mixed Gases	77
5.	On Secondary Spectra and the Conditions under which They May	
	BE PRODUCED	83
	Some New Rectifying Effects in Conducting GasesP. G. Nutting	95
	ON FIBERS RESEMBLING QUARTZ IN THEIR ELASTIC PROPERTIES. K. E. Guthe	101
8.	On the Temperature of the ArcC. W. Waidner and G. K. Burgess	109
	NO. 2.	
	[Issued February 1, 1905.]	
9.	THE ABSOLUTE MEASUREMENT OF INDUCTANCEE. B. Rosa and F. W. Grover	125
	THE ABSOLUTE MEASUREMENT OF CAPACITYE. B. Rosa and F. W. Grover	153
	OPTICAL PYROMETRY	189
12.	On the Theory of the Matthews and the Russell-Léonard Photom-	
	ETERS FOR THE MEASUREMENT OF MEAN SPHERICAL AND MEAN HEMI-	255
19	SPHERICAL INTENSITIES	$\frac{255}{275}$
13.		210
	NO. 3.	
	[Issued November 1, 1905.]	
14.	MEASUREMENT OF INDUCTANCE BY ANDERSON'S METHOD, USING ALTERNAT-	
	ING CURRENTS AND A VIBRATION GALVANOMETER	
	E. B. Rosa and F. W. Grover	291
15.	Use of Serpentine in Standards of Inductance.	00=
10	E. B. Rosa and F.W. Grover The Silver Coulometer K. E. Guthe	337 349
	HISTORY OF STANDARD WEIGHTS AND MEASURES OF UNITED STATES	949
11.	L. A. Fischer	365
18.	WATTMETER METHODS OF MEASURING POWER EXPENDED UPON CONDENS-	000
	ERS AND CIRCUITS OF LOW POWER FACTOR	383
19.	THE RELATIVE INTENSITIES OF METAL AND GAS SPECTRA FROM ELECTRIC-	
	ALLY CONDUCTING GASES	399
	THE USE OF WHITE WALLS IN A PHOTOMETRIC LABORATORY. E. P. Hyde	417
21.	INFLUENCE OF WAVE FORM ON THE RATE OF INTEGRATING INDUCTION WATT-	401
ดด	METERS	421
44.	L. W. Austin	435
23.	THE POSITIVE CHARGES CARRIED BY THE CANAL RAYSL. W. Austin	439
	RADIATION FROM PLATINUM AT HIGH TEMPERATURESG. K. Burgess	443
	A FIVE-THOUSAND VOLT GENERATOR SET	449
Index		453

ANNOUNCEMENT.

The Bulletin of the Bureau of Standards, of which this is the initial number, will embody the results of its investigations, researches, and other work which may be of importance to the scientific, technical, and manufacturing interests of the country. It will be issued at intervals as frequently as the number of papers ready for publication may require. Schedules of fees, regulations, and other matter pertaining to the testing work of the Bureau will be issued in the form of circulars of information.

S. W. STRATTON,

Director.

Washington, D. C., October 15, 1904.

4

ANNOUNCEMENT.

The Bulletin of the Bureau of Standards, of which this is the initial number, will embody the results of its investigations, researches, and other work which may be of importance to the scientific, technical, and manufacturing interests of the country. It will be issued at intervals as frequently as the number of papers ready for publication may require. Schedules of fees, regulations, and other matter pertaining to the testing work of the Bureau will be issued in the form of circulars of information.

S. W. STRATTON,

Director.

Washington, D. C., October 15, 1904.

THE WHAT ASSAULT

= W3

And a second second



